

storing a value corresponding to the total units consumed in a second
memory area; and [is stored],
updating the second area [being updated] only when the number of units
consumed exceeds or attains the number of bits not stored [bits of] in the first area [(A)].

2. (Amended) A method of managing a counter according to Claim 1,
[characterised in that] wherein the units consumed are recorded in the first area [(A)]
cyclically.

3. (Amended) A management method according to [Claims 1 and 2,
characterised in that] claim 1, wherein an operation of recording n units consumed
comprises the following steps:
- reading the content of the first area [(A)] and comparing the number of
not stored bits (L) in the first area [(A)] with the number of consumed units (n) to be
recorded,
- if [this] the number of not stored bits (L) is greater than or equal to the
number of units (n) to be recorded, storing the bits (n) to be recorded [are stored in the] in
said first area [(A)],
- if [this] the number (L) is less [,] than n, storing L bits [are stored] in the
first area [(A)] and [the] recording (n-L) remaining units [are recorded] in the second area
[(B)] by performing an operation of updating this area, and
erasing the first area [(A) is erased].

4. (Amended) A management method according to [any one of Claims 1 to 4, characterised in that] claim 3, wherein an operation of updating the second area [(B)] comprises a step of writing in this second area a new coded counter value equal to the current value to which the number of stored bits in the first area [(A)] and the (n-L) remaining consumed units to be stored are added.

5. (Amended) A management method according to Claim 4, [characterised in that] wherein the updating comprises a prior step of recording indicator information [(C2)] signifying that an updating is currently being carried out.

6. (Amended) A management method according to [any one of the preceding claims, characterised in that] claim 5, wherein the unit counter has an area [(SB)] for backing up the second area [(B)] and [in that] these two areas each have a field for recording a redundancy code [(CR, SCR)], for checking the integrity of the content of these two areas.

7. (Amended) A management method according to [Claims 4 and 5, characterised in that] claim 6, wherein an operation of recording n units consumed also comprises a prior step of verifying the state of the counter comprising the following operations:

- verifying the absence of the indicator information for a current update:
 - where the indicator information is [indeed] absent:

A2
C01
D000
D000
D000
D000
D000

- [verification of] verifying the validity of the fields containing the redundancy codes:

- where the fields are valid:
 - recording [of] the n units;
- where the fields are not valid:
 - detection of a fault and stoppage of the counter,
- where the indicator information is present:
 - activation of the recovery operation to re-establish the units of the counter.

8. (Amended) A management method according to [Claims 6 and 7, characterised in that] claim 7, wherein an operation of updating the second area [(B) then] includes the following steps:

- recording the indicator information [(C2)],
- copying, in the backup area [(SB)], the coded value [(V0)] of the counter of the second area [(B)],
- recording the new coded value of the counter in the second area [(B)],
- erasing the indicator information [(C2)].

9. (Amended) A management method according to Claim 8, [characterised in that] wherein the recovery operation [consists in] comprises determining at which step the abnormality occurred, and then performing, according to the circumstances determined, the

steps of updating at least one of the backup area, [(SB) and/or of] the second area [(B) and/or of] and the first area [(A)].

10. (Amended) A management method according to Claim 9, [characterised in that] wherein the determination of the step at which the abnormality occurred [consists in] comprises reading the content of each of the areas in order to determine whether the abnormality occurred during the updating of the backup area [(SB)], case 1, during the updating of the second area [(B)], case 2, during the erasure of the first area [(A)], case 3, between the updating of the second area [(B)] and the backup area [(SB)], case 4, or after the updating of these two areas, case 5, and:

[. in] for case 1 [in]:

- copying the value contained in the second area [(B)] into the backup area [(SB)],
- updating the second area [(B)] by recording the new value which is equal to the old one to which the content of the first area [(A)] is added,

- erasing the first area [(A)], and

- erasing the indicator information [(C2)];

[. in] for case 2 [in]:

- copying into the second area [(B)] the value contained in the backup area [(SB)] by adding the value contained in the first area [(A)],
- erasing the first area [(A)], and
- erasing the indicator information [(C2)];

[. in] for case 3 [in]:

- erasing the content of the first area [(A)], and
- erasing the indicator information [(C2)];

[. in] for case 4 [in]:

- implementing the steps according to case 2;

[. in] for case 5 [in]:

- implementing the steps according to case 3.

11. (Amended) A management method according to [any one of the preceding claims, characterised in that it comprises] claim 5, further including the step of recording information signifying a failure [(C1)] in reading or writing to the first area, [(A)] deactivating [the] said area when it has not been possible to read or write in this area, [and a step of reading this] reading said information signifying a failure at each new cycle, and directly recording the units consumed [then being directly recorded] in a coded manner by an operation of updating the second area [(B)].

12. (Amended) A management method according to [Claim 5 and] Claim 11, [characterised in that] wherein the information [(C2)] indicating a current updating and the information signifying a failure [(C1)] in reading and writing to the first area are recorded in a third area [(C)] of [the] said counter.

~~Cancel claims 13 and 14, and add the following new claims:~~

--15. A security module for the protected management of a unit counter in which the number of units of a commodity consumed by users is recorded, comprising:

a first memory area having a predetermined bit capacity, in which at least one bit is stored for each unit that is consumed;

a second memory area in which a value indicating the total number of consumed units is stored; and

a control mechanism which updates the value stored in said second memory area when the sum of the number of units consumed plus the number of bits stored in said first area is at least equal to the bit capacity of said first memory area.

16. The security module of claim 15, wherein said security module is contained in a terminal that manages the consumed units.

17. The security module of claim 16, wherein said terminal is a telephony terminal.--

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